TROPICAL CYCLONE 02B

In stark contrast to its predecessor, Tropical Cyclone 01B, Tropical Cyclone 02B achieved near-super typhoon intensity, and had a major impact on the civilian populace of India. Existing as a discrete disturbance for about 36 hours before becoming the subject of a TCFA, the cyclone followed a sinuous west-northwest track under the mid-level subtropical ridge. Although TC02B had good outflow into the upper-level easterlies, landfall in southern India was expected by about 72 hours, prompting early forecasts of intensification to only nominal typhoon intensity followed by weakening due to the approach of landfall. Because of a weakness in the subtropical ridge, a moderate turn toward the northwest was expected, however the actual track change turned out to be much more northward than anticipated. This permitted the cyclone to stay off-shore and to establish strong outflow into the upper-level southwesterlies of a passing 200-mb short-wave trough. As the northward turn began, JTWC modified the intensity forecast to one of rapid deepening beginning with the 070000Z warning. The rapid deepening did in fact occur beginning at 061800Z with a 60 kt (30 m/sec) intensity and peaking at 125 kt (65 m/sec) by 080600Z: an increase of 65 kt (33 m/sec) in 36 hours. At 091200Z, the cyclone, with winds of 100 kt (50 m/sec) made landfall 165 nm (305 km) north of Madras in the vicinity of Machilipatnam in Andra Pradesh State.

In impact of this cyclone on India was substantial. An estimated 150,000 people were evacuated in preparation for landfall. Over 100 villages were destroyed resulting in at least 510 human fatalities. The cyclone also wreaked havoc on the rich agriculture industry of the region killing more than 100,000 farm animals and causing more than $600 million in damage to crops. Local officials reported that Tropical Cyclone 02B was the worst disaster for southern India since the 1977 cyclone that killed an estimated 10,000 people.